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SERIAL NO.

INFORMATION DISCLOSURE CITATION

Robert W. Allington, et al.

APPLICANT

June 25, 2003

1723

FILING DATE

GROUP

U.S. PATENT DOCUMENTS

DOCUMENT NO.	PATENT NO	PATENTEE	ISSUE DATE
1.	4,087,391	Quentin, Jean	5-2-78
2.	4,430,216	Yoichiro Ito	2-7-84
3.	5,453,185	Frechet & Svec	9-26-95
4.	5,728,457	Frechet & Svec	3-17-98
5.	5,334,310	Frechet & Svec	8-2-94
6.	5,767,387	Wang	6-16-98
7.	Re. 31,974	Brownlee	8-27-85
8.	5,439,593	Price	8-8-95
9.	6,248,798 B1	Slingsby, et al	6-19-01
10.	4,283,280	Brownlee	8-11-81
11.	4,313,828	Brownlee	2-2-82
12.	4,464,240	Hansen	8-7-84

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July 11, 2005

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ATTY. DOCKET NO.

SERIAL NO.

13.	4,465,571	Hansen	8-14-84
14.	3,246,767	Pall et al.	4-19-66
15.	3,353,682	Pall et al.	11-21-67
16.	3,598,728	Bixler et al.	8-10-71
17.	3,696,061	Selsor et al.	10-3-72
18.	3,796,657	Pretorius et al.	3-12-74
19.	3,808,125	Good	4-30-74
20.	3,878,092	Fuller	4-15-75
21.	3,954,608	Valentin	5-4-76
22.	4,031,037	Kalal et al.	6-21-77
23.	4,102,746	Goldberg	7-25-78
24.	4,169,014	Goldberg	9-25-79
25.	4,340,483	Lukas et al.	7-20-82
26.	4,447,328	Kamiyama et al.	5-8-84
27.	4,486,311	Nakajima et al.	12-4-84
28.	4,497,710	Wagu et al.	2-5-85
29.	4,565,832	Kobashi et al.	1-21-86
30.	4,747,956	Kiniwa	5-31-88
31.	4,794,177	Peska et al.	12-27-88
32.	4,889,632	Svec et al.	12-26-89
33.	4,913,812	Moriguchi et al.	4-3-90

THE RECORD

JULY 11, 2005

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ATTY. DOCKET NO.

SERIAL NO.

34.	4,923,610	Svec et al.	5-8-90
35.	4,952,349	Svec et al.	8-28-90
36.	5,019,270	Afeyan et al.	8-28-91
37.	5,130,343	Frechet et al.	7-14-92
38.	5,135,650	Hjerten et al.	8-4-92
39.	5,183,885	Bergot	2-2-93
40.	5,228,989	Afeyan et al.	7-20-93
41.	5,306,426	Afeyan	4-26-94
42.	5,306,561	Frechet et al.	4-26-94
43.	5,384,042	Afeyan et al.	1-24-95
44.	5,389,449	Afeyan et al.	2-14-95
45.	5,503,933	Afeyan et al.	4-2-96
46.	5,552,041	Afeyan et al.	9-3-96
47.	5,605,623	Afeyan et al.	2-25-97
48.	5,645,717	Hjerten et al.	7-8-97
49.	5,647,979	Liao et al.	7-15-97
50.	5,814,223	Hjerten et al.	9-29-98
51.	5,833,861	Afeyan et al.	11-10-98
52.	5,916,445	Hjerten et al.	6-29-99
53.	5,935,429	Liao et al.	8-10-99
54.	6,238,565 B1	Hatch	5-29-01

THERKORN

JULY 11, 2003

Form PTO-1449

ATTY. DOCKET NO.

SERIAL NO.

~~55. 6,318,157~~~~Corso et al.~~~~11-20-01~~~~56. App 60/178,553~~~~Huber, C.~~

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	PUBLISHED PATENT		COUNTRY OR PATENT OFF.	TRANSLATION	
		PATENT NO.	APPLICATION NO. DATE		YES	NO
<u>EGT</u>	57	WO 95/22555	PCT/US95/01966 24.08.95	PCT	X	X
<u>EGT</u>	58	JP 63-84641	61-228074 4-15-88	JP		X
<u>EGT</u>	59	0 129 295B2	84200856.7 09.11.88	EPO	X	X
<u>EGT</u>	60	WO 89/07618	154,815 24.08.89	PCT	X	X
<u>EGT</u>	61	0 399 318A1	12.05.90	EPO		X
<u>EGT</u>	62	WO 99/15024	PCT/US97/16993 01.04.99	PCT	X	X
<u>EGT</u>	63	WO 01/93974A1	PCT/US01/18650 13.12.2001	PCT	X	X
<u>EGT</u>	64	EP 0101982	EP19830107709 1984-03-07	EPO	X	X
<u>EGT</u>	65	WO 01/57263A1	PCT/US01/03706 02.02.2001	PCT	X	X
<u>EGT</u>	66	WO 00/52455	PCT/US00/05123 29.02.00	PCT	X	X
<u>EGT</u>	67	WO 00/15321	PCT/US99/20068 01.09.99	PCT	X	X
<u>EGT</u>	68	0 180 321A2	85306830.2 07.05.86	EPO	X	X
<u>EGT</u>	69	DE 35 43 348 A1	11.6.87	German		X
<u>EGT</u>	70	DE 39 00272 A1	12.7.90	German		X
<u>EGT</u>	71	DE 43 34351 A1	13.4.95	German		X
<u>EGT</u>	72	0 264 984 A1	87201768.6 27.04.88	EPO	X	X

THERKORN

JULY 11, 2005

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Form PTO-1449		ATTY. DOCKET NO.		SERIAL NO.	
EGT 73	0 282 177A2	88301278.3	14.09.88	EPO 2	X
EGT 74	DE 43 33821A1		6.04.95	German	X
EGT 75	0 534 567 A2	92202942.6	31.03.93	EPO 2	X
EGT 76	WO 99/44053	PCT/EP99/01391	02.09.99	PCT 2	X
EGT 77	1,188,736		22.04.70	Britain 2	X
EGT 78	211743		15.01.83	Czech	X
EGT 79	6,803,739 (English Translation)		10.03.91	Netherlands X	
EGT 80	0 231 684 A186402709.9		12.08.87	EPO 2	X
EGT 81	0 320 023 A288120747.6		14.06.89	EPO 2	X
EGT 82	0 407 560 B190902731.0		21.06.95	EPO 2	X
EGT 83	0 813 062 A297105607.2		17.12.97	EPO 2	X
EGT 84	0 852 334 A197310361.7		08.07.98	EPO 2	X
EGT 85	WO 90/07965	PCT/US90/00191	26.07.90	PCT 2	X
EGT 86	WO 01/93974 A1	PCT/US01/18650	13.12.2001	PCT 2	X
EGT 87	WO 00/15778	PCT/US99/20596	23.03.00	PCT 2	X

OTHER DOCUMENTS (Including Author, Title, Date Pertinent Pages, Etc.)

EXAMINER
INITIALS

~~EGT~~ 88 "Monolithic Matrix Accelerates Separation", HIGH TECH SEPARATIONS
NEWS, July 2001, Volume 14, No. 2

THERKORN

JULY 11, 2003

18-529-8-1

10/607,080

Form PTO-1449

ATTY. DOCKET NO.

SERIAL NO.

- EGT 89 "Rapid reversed-phase separation of proteins and peptides using optimized 'moulded' monolithic poly(styrene-co-divinylbenzene) columns", JOURNAL OF CHROMATOGRAPHY A, 865 (1999) pg 169-174
- EGT 90 Poster Presentation "Macroporous Poly(Styrene-co-Divinyl-benzene) Monoliths for High Throughput Reversed-Phase Separation of Biomolecules", 217th ACS National Meeting in Anaheim, March 21, 1999 by Shaofeng Xie
- EGT 91 Poster Presentation "Monolithic Macroporous Poly(Styrene-co-Divinylbenzene) Columns for Rapid or High Throughput Reversed-Phase Separation of Proteins and Peptides", PREP'99- 1999 International Symposium, San Francisco, May 26, 1999, by Shaofeng Xie
- EGT 92 Poster No. 1659P Presentation "High-Speed Bioseparation with Monolithic Columns", Poster No. 1659P, Bioanalytical Separation Session, PITTCON2001, New Orleans, March 5, 2001, by Shaofeng Xie
- EGT 93 Poster Presentation "Applications of Polymeric Monolith Columns for Fast Bioseparations", Presented at ISPPP2000, Ljubiana, Slovenia, by Shaofeng Xie, et al
- EGT 94 Poster Presentation "High Throughput Bioseparations in Monolithic Ion Exchangers", presented at HPLC2000, Seattle, WA by Shaofeng Xie, et al.
- EGT 95 2106P Poster Presentation "Rapid Bio-separations in Columns with Monolithic Separation Media", at Pittcon 2000, New Orleans, LA, by S. Xie, et al.
- EGT 96 "Carbonate Mysteries", Henry Elderfield; *Science*, Vol. 296, May 31, 2002, 1618 - 1621
- EGT 97 L.R. Snyder, J.J. Kirkland, *Introduction to Modern Liquid Chromatography, Second Edition*, John Wiley & Sons, Inc., (1979) 183-195, 203-204, 492-494
- EGT 98 "High-performance liquid chromatography on continuous polymer beds", S. Hjerten, J-L Liao, and R. Zhang, *J. Chromatogr*, 473 (1989) 273-275

THERKOR

~~3000~~ JULY 11, 2005

Form PTO-1449

ATTY. DOCKET NO.

SERIAL NO.

- 99 EGT "Reactive polymers: 61. Reaction of macroporous poly(glycidyl methacrylate-co-ethylene dimethacrylate) with phenol", D. Horak, J. Straka, J. Stokr, B. Schneider, T.B. Tennikova and F. Svec, *Polymer*, 32, no. 6 (1991) 1135-1139
- 100 EGT "REACTIVE POLYMERS, XXV. Morphology of Polymeric Sorbents Based on Glycidyl Methacrylate Copolymers", Z. Pelzbauer, J. Lukas, F. Svec and J. Kalal, *J. Chromatogr.*, 171 (1979) 101-107
- 101 EGT "Chiral electrochromatography with a 'moulded' rigid monolithic capillary column", E.C. Peters, K. Lewandowski, M. Petro, F. Svec and J.M.J. Frechet, *Analy. Commun.*, 35 (1998) 83-86
- 102 EGT "High-Performance Membrane Chromatography. A Novel Method of Protein Separation", T.B. Tennikova, B.G. Belenkii, and F. Svec, *J. of Liquid Chromatogr.*, 13(1) (1990) 63-70
- 103 EGT "Continuous beds for standard and micro high-performance liquid chromatography", Jia-Li Liao, Rong Zhang and Stellan Hjerten, *J. of Chromatography*, 586 (1991) 21-26
- 104 EGT "Continuous Beds for Microchromatography: Reversed-Phase Chromatography", Jia-Li Liao, Yi-Ming Li, and Stellan Hjerten, *Analytical Biochemistry*, 234 (1996) 27-30, #1
- 105 EGT "Continuous Beds for Microchromatography: Detection of Proteins by a Blotting Membrane Technique", Jia-Li Liao, Cheng-Ming Zeng, Anders Palm and Stellan Hjerten, *Analytical Biochemistry*, 241 (1996) 195-198
- 106 EGT "High-Performance Liquid Chromatography of Proteins on Compressed, Non-Porous Agarose Beads", Stellan Hjerten and Jia-Li Liao, *J. of Chromatography*, 457 (1988) 165-174
- 107 EGT "The Design of Agarose Beds for High-Performance Hydrophobic-Interaction Chromatography and Ion-Exchange Chromatography Which Show Increasing Resolution with Increasing Flow Rate", Stellan Hjerten, Yao Kunquan and Jia-Li Liao, *Makromol. Chm., Macromol. Symp.* 17 (1988) 349-357
- EGT 108 J. Reusch, D. Josic, *Konigsteiner Chromatographie* (1991) page 158

THERKORN

JULY 11, 2005

Form PTO-1449

ATTY. DOCKET NO.

SERIAL NO.

- EGT 109 "Perfusion chromatography packing materials for proteins and peptides", N.B. Afeyan and S.P. Fulton, *J. of Chromatography*, 544 (1991) 267-279
- EGT 110 "Flow-through particles for the high-performance liquid chromatographic separation of biomolecules: perfusion chromatography", N.B. Afeyan, N.F. Gordon, I. Mazsaroff, L. Varady and S.P. Fulton, *J. Chromatography*, 519 (1990) 1-29
- EGT 111 "In Situ Preparation and Evaluation of Open Pore Polyurethane Chromatographic Columns", F.D. Hileman and R.E. Sievers, *Analytical Chemistry*, V. 45 no. 7 (1973) 1126-1130
- EGT 112 "High Resolution-Low Pressure Liquid Chromatography", T.R. Lynn, D.R. Rushneck, A.R. Cooper, *J. Chromatographic Science*, 12 (1974) 76-79
- EGT 113 "Surface Modified Open-Pore Polyurethane Packings for Liquid Chromatography", D.P. Herman and L.R. Field, *J. Chromatographic Science*, 20 (1982) 55-61
- EGT 114 "Polyurethane Foams and Microspheres in Analytical Chemistry", T. Braun and A.B. Farag, *Analytica Chimica Acta*, 99 (1978) 1-36
- EGT 115 "Coiled High-Efficiency Liquid Chromatography Columns", A.R. Cooper and T.R. Lynn, *Separation Science*, 11(1) (1976) 39-44
- EGT 116 "Ion Chromatography on Methacrylate Ion Exchangers", J. Hradil and F. Svec, *J. of Chromatography*, 475 (1989) 209-217
- EGT 117 "Open-Pore Polyurethane Columns for Collection and Preconcentration of Polynuclear Aromatic Hydrocarbons from Water", James D. Navratil, Robert E. Sievers and Harold Walton, *Analytical Chemistry*, 49(14) (1971) 2260-2263
- EGT 118 "Chemical separations with open-pore polyurethane", James D. Navratil and Robert E. Sievers, *American Lab.* 9(10) (1977) 38-42
- EGT 119 "Open Pore Polyurethane - A New Separation Medium", William D. Ross, *Separation and Purification Methods* 3(1) (1974) 111-131

THER KORN

JULY 11, 2005

Form PTO-1449

ATTY. DOCKET NO.

SERIAL NO.

- EGT 120 "In Situ -- Formed Open-Pore Polyurethane as Chromatography Supports", William D. Ross and Robert T. Jefferson, *J. of Chromatographic Science*, 8 (1970) 386-389
- EGT 121 "In Situ Open-Pore Polyurethane as Chromatography Supports", William D. Ross and Robert T. Jefferson, *Advan. Chromatogr. Proc. Int'l Symp. 6th*, (1970)
- EGT 122 "39. Preparation and Properties of Open Pore Polyurethane", I.O. Salyer, R.T. Jefferson, J.V. Pustinger and J.L. Schwendeman, *163rd National ACS Meeting, Boston, MA* (April, 1972)
- EGT 123 "Preparation and Properties of Open Pore Polyurethane (OPP)", Ival O. Salyer, R.T. Jefferson, John V. Pustinger and James L. Schwendeman, *J. of Cellular Plastics*, 9 (1973) 25-34
- EGT 124 "Applications of Porous Urea/Formaldehyde Polymers", A.M. Usmani, *J. Macromol. Sci.-Chem.*, A19(8&9) (1983) 1237-1246
- EGT 125 Brochure: "Quick Disk", Saulentechnik/Knauer
- EGT 126 Advertisement: "ConSep™", Millipore Corp., Genetic Engineering News, Sept. 15, 1993
- EGT 127 Brochure: "ConSep™ LC 100 System", Millipore Corp.
- EGT 128 Brochure: "MemSep® Chromatography Cartridges", Millipore Corp.
- EGT 129 "High-Performance Liquid Chromatography-Electrospray Ionization Mass Spectrometry of Single- and Double-Stranded Nucleic Acids Using Monolithic Capillary Columns", Premstaller, Oberacher, Huber, *ANALYTICAL CHEMISTRY*, Vol. 72, No. 18, 4386-4393
- EGT 130 "Urea-formaldehyde resin monolith as a new packing material for affinity chromatography", Xuefei Sun, Zhikuan Chai; *JOURNAL OF CHROMATOGRAPHY A*, 943 (2002) 209-218
- EGT 131 "From Microspheres to monoliths: Synthesis of porous supports with tailored properties by radiation polymerization", Grasselli, Smolko, Hargittai, Safrany, *NUCLEAR INSTRUMENTS AND METHODS IN PHYSICS RESEARCH B* 185 (2001) 254-261

THERKORN

JULY 11, 2003

Form PTO-1449

ATTY. DOCKET NO.

SERIAL NO.

-
- EGT 132 "Polymer Reprints", C.H. Do, G.B. Butler, AMERICAN CHEMICAL SOCIETY, DIVISION OF POLYMER CHEMISTRY, Vol. 29 (1988), 513-514
-
- EGT 133 "Functional Polymeric Microspheres Synthesized by Radiation Polymerization", A. Safran, S. Kano, M. Yoshida, H. Omichi, R. Katakai, M. Suzuki; *Radiat. Phys. Chem.*, Volume 46, No. 2 (1995) 203-206
-
- EGT 134 "Viscometric and Light Scattering Studies on Microgel Formation by γ -Ray Irradiation to Aqueous Oxygen-free Solutions of Poly(vinyl alcohol)", B. Wang, S. Mukataka, M. Kodama, E. Kokufuta; *Langmuir*, Volume 13 (1997) 6108-6114
-

EXAMINER

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DATE CONSIDERED

JULY 11, 2005